Cape Comorin

Covid -19 Lockdown-Challenges to Higher Education

Harsha R, Associate Professor, Dr Ambedkar Institute of Technology, Bengaluru, India

Dr Thara Bai, Assistant Professor, VHD Home Science College, Bengaluru, India

Abstract: The world today is facing pandemic as the Corona virus is sweeping its way around the globe and its impact is only beginning to be visible. The pandemics has brought in many deaths, thousands have been quarantined and has led to a serious situation of global health emergency. To curb the spread of this virus, lockdown has been implemented very stringently. In order to handicap the virus from spreading, social distancing and limiting contact with each other is a necessary evil. All walks of life has been severely affected due to this lockdown which is in effect, this in turn has crippled the economy painfully. Like other sectors education institutions are also affected in terms of lagging behind in the annual academic calendar of events. This paper construe the capacity of the country and its teaching fraternity to endure the education process at the colleges & universities in the form of online distance learning methods and challenges faced during this process, this paper reviews the different available online platforms that are used and challenges faced by both the teaching faculty and the students during the online classes
Keywords: Pandemic, Lockdown, Social Distancing, online education, distance learning, online platform.
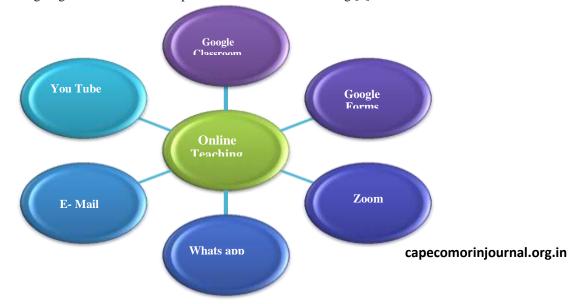
Introduction:

COVID which was detected in Wuhan, China on 31 December 2019, the virus spreads through human to human transmission which was confirmed by the World Health Organization (WHO) on 20 January 2020[1].The COVID has challenged the advancements not only in the healthcare sector but in several other sectors such as finance, education, automotive & engineering sectors. The need of the hour is social distancing and excellent medical care. The pandemic has led to a total lock down world over and India is no exceptions. As of today around three hundred and sixty eight million people have been reported as infected by the virus and around two hundred and fifty eight thousand have been reported as dead. This has warranted a complete shutdown of all the industries and various sectors, educational institution is not an exception to this. The shutdown of the education institutions has led to many apprehensions among the students and teaching fraternity. However the teaching fraternity has been adopting innovative methods to interact with the students and focusing on the curriculum.

With this back drop the paper is based on the following objectives:

1. To highlight the sources and importance of e learning and e-teaching.
2. To discuss the challenges in digital learning.
3. To study the measures and methods in out coming the challenges.

1. Sources and Importance of E-learning and E-teaching.

The teaching fraternity with the use of many e teaching or e learning applications such as Google class room, Zoom, Easy Class, Go To Meeting, Remind, Slack and many others have been adopted to reach the students as far as possible. Now the bigger challenge was to select an application among the ocean of applications available on the internet catering to every ones needs with low data consumption and better stability during the live streaming. Figure 1: Various online platforms available for teaching [9]

It is clear that from the above figure there are many online platforms available at our disposable. Different apps for different purposes for teaching the students for the live streaming / conferences/ lecture series zoom app has been used and for assigning students assignments the Easy Class app and Google Classroom application are utilized. For students who cannot join the online class room PPTs were uploaded in slide share an online platform so that the students can download the PPT whenever they get internet access and any doubt clarification is clarified through calls.

To enable the practical knowledge of labs, many universities and organizations have come forward and provided virtual labs for the students. keeping in mind the financial crisis during the lock down many organizations have offered free online courses for the students one such example is Tata Steel which offered online courses with the registration fee of Rs.1/- just by logon to www.capabilitydevelopment.organd signing with the details and take on the courses. They provide nearly 27 courses. Some of them are: Advanced Microsoft Excel, Basic Metallurgy, Basic TQM, Bearings, Machine Learning, Industry4.0, MSOffice, PLCs Basic, Induction Motor, Transformer and many more. As it has been noticed that courses offered not only targets just one branch of engineering but encompasses all the streams of engineering such as Computer Science, Electronics And Communication, Mechanical, Info Science, Instrumentation and Technology.

2.Challenges in Digital Learning

The first challenge was to assess the student's access to internet connectivity. Specially, the students hailing from rural and backward areas. The students were expected to have a smart phone with 4G compatibility to enable streaming of the live teaching. The second challenge was to have good internet connectivity even in[2] urban areas to avoid buffering and lagging of the live stream, this can happen when Internet connection speed is inadequate to accommodate the encoder's bitrate or if there is excess load on the server which will make the application to crash. The third challenge is the live streaming focuses only on the theoretical imparting of the subjects without actual use of the laboratory, as technical education is more practical oriented.

Challenges to Students

From the student's point of view the challenges were, the students had to leave the hostel and PG's immediately due to lockdown and they could not carry their text books and laptops to their native and as such it was not possible for them to take part in the e-learning. The final year students are worried and are anxious to know if they will have an extension of the current semester due to which there joining dates for companies are extending. Students who are planning to take admission in foreign universities and who want to pursue their higher education in India are worried that due to this lockdown they might have to lose one year. I have also been counselling the students to in still confidence in them.

3.Outcome of E-learning and Challenges of E-learning

The online learning process initiated by the lock-down on a large scale is not just a platform for the students but a greater platform for the faculties as well offering many short-term certificate courses. There are many organizations and online platforms which have been offering various development courses to the faculties as well. The teaching faculties are making use of this lock down to upgrade their knowledge by enrolling themselves in various Faculty Development Programs offered by ATAL, NPTEL and MOOC. Many IITs are offering two week long online Faculty Development Courses which are a boon to the teachers the faculties have been upgrading themselves from the various on-line courses conducted by IITs and a good knowledge exchange process has been initiated which otherwise would have not been possible in the absence of the online platform.

Conclusion

To conclude, the students have accepted the online teaching courses with open heart. They are really happy that Institutions are putting efforts to keep the curriculum on track amidst the lockdown, on top of all the issues and against the backdrop of these challenges. The Online Education is "not a substitute but an appendage to classroom teaching and other methodologies. It is a temporary aid during the difficult situation that we are facing"

References

WHO (World Health Organization). (2020). WHO Director-General's Remarks at the Media Briefing on COVID-19 .Available at:https://www.who.int/dg/speeches/detail/whodirector-general-s-opening-remarks-at-the- media-briefing-on-covid-19---11-march-2020.

Basilaia, G., &Kvavadze, D. (2020). Transition to Online Education in Schools During a SARS-CoV-2 Coronavirus (COVID-19) Pandemic in Georgia. Pedagogical Research, 5(4), em0060.https://doi.org/10.29333/pr/7937

Cuaton, G. P. (2020).. Philippine Higher Education Institutions in the Time of COVID-19 Pandemic (Working Paper No.001).

Eric Liguori, Christoph Winkler, (2020). From Offline to Online: Challenges and Opportunities for Entrepreneurship Education Following the COVID-19 Pandemic, Entrepreneurship Education and Pedagogy,https://doi:10.1177/2515127420916738

UNESCO. (2020). UNESCO Report, National Learning Platforms and Tools". Retrieved on 4 April 2020 fromhttps://en.unesco.org/covid19/educationresponse/nationalresponses

R.Radha, (2019). Education for Man Making and Character Building: Inspirationsfrom Swami Vivekananda, Swami Vivekananda Centre for Higher Research and Education, Alagappa University, Karaikudi, Tamil Nadu, India.

AR.Saravanakumar.(2014). Present Scenario and Future Prospects of Higher Education in India, Proceeding of the Social Sciences Research ICSSR 2014 (e-ISBN 978-967-11768-7-0). Kota Kinabalu, Sabah, Malaysia. Organized byhttp://WorldConferences.net

K. MahalakshmiR.Radha COVID 19: A Massive Exposure Towards Web Based Learning, Xi'an DianziKeji DaxueXuebao/Journal of Xidian University • April 2020. DOI: 10.37896/jxu14.4/266

Zayapragassarazan Z. COVID-19: Strategies for Online Engagement of Remote Learners [version 1; not peer reviewed]. F1000Research 2020, 9:246 (document) (https://doi.org/10.7490/f1000research.1117835.1)